

This listing of claims replaces all prior versions and listings:

**Listing of Claims:**

5 1-23. (canceled)

24. (previously presented) A computer-implemented method comprising:

on a first thread, downloading first and second compressed pieces of data for first and second images, the first and second compressed pieces of data 10 received from an external source over a communication network;

on a second thread, decompressing the first and second compressed pieces of data to provide first and second pieces of memory data;

on a third thread, applying image processing to the first and second pieces of memory data to provide first and second processed pieces of memory data;

15 on a fourth thread, sending the first and second processed pieces of memory data through a print driver to a print spooler to provide first and second pieces of print-ready data; and

on a fifth thread, transferring the first and second pieces of print-ready data through an input/output to a printer effective to enable the printer to print the first 20 and second images,

wherein the acts of downloading the first compressed piece of data on the first thread, decompressing the first compressed piece of data on the second thread, applying image processing to the first piece of memory data on the third thread, sending the first processed piece of memory data on the fourth thread, and

transferring the first piece of print-ready data on the fifth thread are performed in the given order,

wherein one or more of the acts of downloading the second compressed piece of data on the first thread, decompressing the second compressed piece of data on the second thread, applying image processing to the second piece of memory data on the third thread, and sending the second processed piece of memory data on the fourth thread are performed in parallel with one or more of the acts of decompressing the first compressed piece of data on the second thread, applying image processing to the first piece of memory data on the third thread, 10 sending the first processed piece of memory data on the fourth thread, and transferring the first piece of print-ready data on the fifth thread, and

wherein the act of downloading is responsive to a user request to print the images and the acts of decompressing, applying, sending, and transferring are performed without further request from the user or another user.

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25. (previously presented) The method of claim 24, wherein the compressed pieces of data comprise raster data.

26. (previously presented) The method of claim 24, wherein the 20 communication network comprises a global internet.

27. (previously presented) The method of claim 24, wherein the first and second images each comprise a page of a document.

28. (previously presented) A computer-implemented method comprising:

on a first thread, downloading first and second compressed pieces of data for first and second images, the first and second compressed pieces of data received from an external source over a communication network;

5 on a second thread, decompressing the first and second compressed pieces of data to provide first and second pieces of memory data;

on a third thread, applying image processing to the first and second pieces of memory data to provide first and second processed pieces of memory data;

on a fourth thread, sending the first and second processed pieces of memory

10 data through a print driver to a print spooler to provide first and second pieces of print-ready data; and

on a fifth thread, transferring the first and second pieces of print-ready data through an input/output to a printer effective to enable the printer to print the first and second images,

15 wherein the acts of downloading the first compressed piece of data on the first thread, decompressing the first compressed piece of data on the second thread, applying image processing to the first piece of memory data on the third thread, sending the first processed piece of memory data on the fourth thread, and transferring the first piece of print-ready data on the fifth thread are performed in

20 the given order, and

wherein the acts of downloading, decompressing, applying, sending, and transferring are performed five times, once for each of the first, the second, a third, a fourth, and a fifth images, and the act of downloading a fifth compressed piece of data for the fifth image is performed concurrently with decompressing a fourth compressed piece of data for the fourth image, applying image processing to a

third piece of memory data for the third image, sending the second processed piece of memory data for the second image, and transferring the first processed piece of memory data for the first image.

5        29. (previously presented) The method of claim 24, wherein the acts of  
downloading the second compressed piece of data on the first thread,  
decompressing the second compressed piece of data on the second thread,  
applying image processing to the second piece of memory data on the third thread,  
sending the second processed piece of memory data on the fourth thread, and  
10      transferring the second piece of print-ready data on the fifth thread are performed  
in the given order.

15       30. (previously presented) The method of claim 24, wherein the act of  
decompressing the first compressed piece of data on the second thread is  
performed immediately after completion of downloading of the first compressed  
piece of data on the first thread.

20       31. (previously presented) The method of claim 24, wherein the act of  
downloading the first and second compressed pieces of data on the first thread  
downloads the second compressed piece of data immediately after downloading  
the first compressed piece of data.

32-34. (canceled)

35. (currently amended) A computer-implemented method comprising:  
downloading compressed pieces of data for images, the compressed pieces  
5 of data received from an external source over a communication network;  
decompressing the compressed pieces of data to provide pieces of memory  
data;  
applying image processing to the pieces of memory data to provide  
processed pieces of memory data;  
10 sending the processed pieces of memory data through a print driver to a  
print spooler to provide pieces of print-ready data; and  
transferring the pieces of print-ready data through an input/output to a  
printer effective to enable the printer to print the images,  
wherein the acts of downloading, decompressing, applying, sending, and  
15 transferring are performed in the given order and on multiple separate threads of a  
single processor for at least one of the images, wherein three or more of all five of  
these acts are performed concurrently for different images, and wherein the acts of  
decompressing, applying, sending, and transferring are performed automatically  
responsive to completion of the prior act in the given order for the same piece of  
20 data.

36. (previously presented) The method of claim 35, wherein the compressed  
pieces of data comprise raster data.

37. (previously presented) The method of claim 35, wherein the communication network comprises a global internet.

38. (previously presented) The method of claim 35, wherein one or more of  
5 the images comprise a page of a document.

39. (previously presented) A computer-implemented method comprising:  
downloading compressed pieces of data for images, the compressed pieces  
of data received from an external source over a communication network;  
10 decompressing the compressed pieces of data to provide pieces of memory  
data;  
applying image processing to the pieces of memory data to provide  
processed pieces of memory data;  
sending the processed pieces of memory data through a print driver to a  
15 print spooler to provide pieces of print-ready data; and  
transferring the pieces of print-ready data through an input/output to a  
printer effective to enable the printer to print the images,  
wherein the acts of downloading, decompressing, applying, sending, and  
transferring are performed in the given order and on multiple separate threads of a  
20 single processor for at least one of the images, wherein three or more of these acts  
are performed concurrently for different images, and  
wherein the acts of downloading, decompressing, applying, sending, and  
transferring are performed five times, once for each of a first, second, third, fourth,

and fifth images, and the act of downloading a compressed piece of data for the fifth image is performed concurrently with decompressing a compressed piece of data for the fourth image, applying image processing to a piece of memory data for the third image, sending a processed piece of memory data for the second image, and transferring a processed piece of memory data for the first image.

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